

IDENTIFIKASI KEANEKARAGAMAN GEOLOGY UNTUK MENDUKUNG DAERAH GUNUNGSEWU SEBAGAI KAWASAN GEOPARK DUNIA

Oleh :

Sari Bahagiarti Kusumayudha, Jatmiko Setiawan

¹ Teknik Geologi UPN "Veteran" Yogyakarta, Indonesia

E-mail: saribk@gmail.com

ABSTRACT

Gunungsewu area is a Tropical karst terrain, administratively belongs to the Gunungkidul regency (DIY), Wonogiri regency, and Pacitan regency of Central Java. It is geographically situated between 6° 10' to 6° 30' S latitude and 99° 35' to 100° E longitude, about 25 km southeast of the Yogyakarta city, approximately 109 km NNW from the Pacitan town, and only less than 20km SW of the Wonogiri town. The Gunungsewu area is around 800 km². It is easily accessible from Yogyakarta - Wonosari, Wonogiri and Pacitan.

Geology of the Gunungsewu area is a reflection of various paleo depositional environmental, tectonic and surface processes, inherit a wide spectrum of carbonates rocks with plentiful fossils, deformational structures, fascinating geomorphology, and unique hydrogeology. Basement of the Gunungsewu is composed of early Tertiary period volcanic rocks of Semilir and Nglanggeran formations. At the northwestern part, the basement is overlain by marl of Sambipitu Formation, while at the northeastern part is overlain by tuffaceous-marly limestone of Oyo Formation. The Sambipitu and Oyo formations are covered by karstic limestone of Wonosari Formation and marl of Kepek Formation. In the Gunungsewu area, the youngest lithologic unit comprises Quaternary alluvial and volcanic deposits of Mt. Merapi.

Due to its plentiful geodiversity, Gunungsewu deserves to be promoted as one of world geoparks. The Gunungsewu Geopark will possess one of the most beautiful tropical karst landscapes in Southeast Asian region.

Keywords: Gunungsewu, geodiversity, world geopark